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| 1444 | 7590 | 04/28/2004 | EXAMINER | |
| BROWDY AND NEIMARK, P.L.L.C. | | | HOANG, THAI D | |
| 624 NINTH STREET, NW | | | ART UNIT | |
| SUITE 300 | | | PAPER NUMBER | |
| WASHINGTON, DC 20001-5303 | | | 2667 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/552,564

Applicant(s)

BINDER, YEHUDA

Examiner

Thai D Hoang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 03/24/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 37-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 16-34, 37-38, 40-49 is/are rejected.
- 7) ☒ Claim(s) 13-15, 39 and 50-52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The finality of the previous Office action is withdrawn. A new final action follows.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The adapter 52 described in figures 6 and 7 do not couple to a wireless modem and wired line modem as recited in claim 37. Instead, the outlet 71 comprises modems 23b and 27b coupling to an adapter 72 for communication with DTE in a wireless format, but 23a and 27b do not wired modem and non-wired modem. Similarly, modems 23a and 27a coupled to adapter 28a do not wired modem and non-wired modem. It is confusing between the system describe in the specification and figures with the claim language recited in claim 37.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2.1 Claims 1, 7-8, 16-23, 26-30, 33-34, 37-38 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al, US Patent No. 5,150,365 in view

of Swartz et al, US Patent No. 6,330,244 B1, hereafter referred to as Hirata and Swartz respectively.

Regarding claims 1, 20, 27, 34 and 37-38, Hirata discloses a LAN communication system for coexistent base band and broadband signals; fig. 1. Hirata teaches that the LAN is a wired network comprising:

at least one electrical conducting line of a building having at least two conductors and operative to transport both base band and broadband signals; fig. 1; abstract; col. 1, line 59 - col. 2, line 20; (at least one electrically-conducting line within the building, said electrically-conducting line having at least two conductors and operative to transport data communication signals)

filtering units 5 coupled to the electrical conducting line; fig. 1 (at least two outlets, each operative for coupling to the electrically-conducting line)

branch circuit 7 and 8 coupled to electrical conducting line in order to communicates with the work station 9 and TV 10; fig. 1; abstract; col. 1, line 59 - col. 2, line 20 (at least one wired modem coupled to said electrically-conducting line, operative to communicate over said electrically-conducting line and furthermore operative for concurrently distributing a service other than the transport of data communication signals)

Hirata does not explicitly disclose the electrical conducting lines at circuits 7 and 8 are installed in a wall of a building. However, the outlets, which are installed in the wall of the building, are well-known for several tens of years ago. Also, Hirata does not teach that the network comprises a non-wired segment. However, Swartz discloses a system

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for digital radio communication between a wireless LAN and a PBX. Swartz teaches that the system comprises a plurality of access points (fig. 1, elements 13 and 23; fig. 6 element 610, 614, 620), which inherently comprises wireless modems in order to communicate with Mobile units (12s and 22s) by radio frequency. The access points are coupled to a wired LAN network 16 and 26; see figs. 1 and 6s. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt wireless LAN modem disclosed by Swartz into Hirata's system in order to improve services for users because it allows the users access to the LAN by either wired-line and wireless mode.

Regarding claims 7-8, 26, 33 and 44-45, Hirata teaches that the network transmits both data communication and TV concurrently over a cable TV.

Regarding claims 16 and 19, Hirata does not teach that the system comprises a module operative to coupling said wired segment to said non-wired segments. However, Swartz teaches that the system comprises the access points (13 and 23), which are coupled to LAN network (16, 26 wired segment) and mobile units (non-wired segment). It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt wireless LAN modem disclosed by Swartz into Hirata's system for advantages cited above with respect to claim 1.

Regarding claims 17, 22 and 29, Swartz teaches that the wireless modem 104 and a transmit/receive unit 105 are fully integrated in the access points to communicate with mobile units.

Regarding claims 18, 23 and 30, Swartz does not explicitly disclose that the wireless modem partially integrated within one of the outlets. See *In re Larson*, 144 USPQ 347 (CCPA 1965). It would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate wireless modules disclosed by Swartz in order to simplify the hardware of the system.

Regarding claims 21 and 28, the network disclosed by Swartz inherently comprises the step of converting from a wired line protocol to a wireless protocol in order to ensure the communication between wire line and wireless mode.

2.2 Claims 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al, US Patent No. 5,150,365 in view of Swartz, US Patent No. 6,330,244, Dodds et al, US Patent No. 5,841,841 and further in view of publication "A Transmitting and Receiving Method for CDMA Communications Over Indoor Electrical Power Lines" published by Okazaki; hereafter referred to as Hirata, Swartz, Dodds and Okazaki respectively.

Regarding claim 2, Hirata teaches that the LAN services both base band and broadband signals; abstract; col. 1, line 59 - col. 2, line 20; Hirata does not teach the LAN transmits telephone service and power service. However, Dodd discloses a system that allows both voice and data signal transmit simultaneously in a cable 10; abstract, fig. 1; and Okazaki teaches a network including data signal transmitted in an electrical power network. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method disclosed by Dodds and the method disclosed by Okazaki into the Hirata's system in order to reduce the cost of the network

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and manage the network easily since all of the services data, TV, telephone, and power are transmitted in only one electrical conducting line network.

2.3 Claims 3-4, 24, 31, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al, US Patent No. 5,150,365 in view of Swartz, US Patent No. 6,330,244, and further in view of Dodds et al, US Patent No. 5,841,841, hereafter referred to as Hirata, Swartz, and Dodds respectively.

Regarding claims 3-4, 24, 31, and 40-41 both Hirata and Swartz do not teach that the electrical conducting lines is a telephone line and one of the outlets is a telephone outlet and the telephone line provides both telephony and data service concurrently. However, Dodds teaches that at the customer site, both voice and data signals are transmitted on the same telephone line; figure 1; abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method disclosed by Dodds into the Hirata's system for a advantages cited above with respect to claim 2.

2.4 Claims 5-6, 25, 32 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al, US Patent No. 5,150,365 in view of Swartz, US Patent No. 6,330,244, and further in view of publication "A Transmitting and Receiving Method for CDMA Communications Over Indoor Electrical Power Lines" published by Okazaki, hereafter referred to as Hirata, Swartz and Okazaki respectively.

Regarding claims 5-6, 25, 32, and 42-43 both Hirata and Swartz do not teach that the electrical conducting lines is a power line and wherein at least one of said outlets is a power outlet, and the power line is operative to carrying both electrical

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power and data communications concurrently. However, Okazaki teaches that the network transmits both electric power and CDMA data signal concurrently over an indoor power lines network; abstract; part 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method disclosed by Okazaki into the Hirata's system for advantages cited above with respect to claim 2.

2.5 Claims 9-12 and 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al, US Patent No. 5,150,365 in view of Swartz, US Patent No. 6,330,244, and further in view of publication "Wireless LAN Technologies and Applications" published by Dastangoo, hereafter referred to as Hirata, Swartz and Dastangoo respectively.

Regarding to claims 9-12 and 46-49, both Hirata and Swartz do not explicitly teach that the non-wired segment is operative to communicating data by infrared light and RF transmission. However, Dastangoo suggests a wireless LAN that is operative to communicating data by infrared light and RF transmission; abstract; parts I and II. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the wireless LAN method disclosed by Dastangoo into the Hirata's system in order to adapt with conventional system used in the network.

Allowable Subject Matter

3. Claims 13-15, 39 and 50-52 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 03/24/2004 have been fully considered but they are not persuasive.

4.1 Regarding claim 1, on page 10, lines 11-13 and page 12, lines 15-18 of the remarks, Applicant argues that neither reference suggests the possibility of combining the two different types of modems (wired modem and wireless modem). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, although the references do not suggest for combining both types of modems; however, one of ordinary skill in the art would motivated to do this because the wireless modem transmits/receives the same signal conveyed in the wire segment to/from the mobile units without wire and vise versa. Furthermore, page 11, lines 1-2, page 13, lines 3-5, Applicant argues that neither of the references discloses the use of outlets. Although Hirata does not explicitly discloses the outlet for connecting TV or work station is installed in the wall of the building as recited in claim 1, but it is well-known several tens of years ago.

4.2 Regarding claims 7-8, page 13, lines 15-21, Applicant argues that the reference does not disclose "at least one of the electrically-conducting lines is a cable television

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line, and wherein at least one of the outlets is a cable television outlet" as recited in claim 7. Examiner respectfully disagrees. Although Hirata does not explicitly disclose the outlet, however, according to the figure 1, the branch circuit 8 must be coupled to the TV 10 by a connector.

4.3 Regarding claim 20, page 14, Applicant argues that neither of the references discloses the use of outlets. Hirata's system inherently comprises an outlet for connecting TV 10 or workstation 9 with the local network. Also, Applicant argues the wire cables 4 could not be existing building wiring because they are all coaxial lines. Examiner respectfully disagrees. The building wiring comprises power lines and communication lines, the coaxial cables are used for communication; therefore, it is a portion of the building wiring system. Furthermore, Applicant argues that neither reference suggests the possibility of combining the two different types of modems (wired modem and wireless modem). Although the references do not suggest for combining both types of modems; however, one of ordinary skill in the art would be motivated to do this for reasons cited above with respect to claim 1.

4.4 Regarding claim 21, page 14 of the remarks, Applicant argues that neither reference discloses protocol conversion. Examiner respectfully disagrees. Page 13, lines 19-21, the specification discloses *"the data to and from the wired segment and the data to and from the non-wired segment are handled by a protocol adapter 52"*. It indicates the adapter 52 converts to and/or from wired line and wireless protocols. Since LAN of the system disclosed by Swartz is a wireless LAN, therefore, it must include converting protocol between wire segment and mobile units; see figures 1 and 6s.

4.5 Regarding claims 22-23, pages 14-15, Applicant argues that neither of the references discloses the use of outlets. Examiner believes this argument is answered above with respect to claims 1, 7-8 and 20.

4.6 Regarding claim 26, page 15 of the remarks, Applicant argues that claim 26 distinguishes in a manner similar to claim 7. Examiner agrees claim 7 does not recite the modem (i.e. broader than claim 26). However, limitations recited in claims 7 and 26 are almost similar and clearly disclosed in figure 1 of the Hirata system.

4.7 Regarding claims 27-30 and 33-34, Applicant does not point out any specific difference between claims 27-30 with claims 20-23 and claims 33-34 with claims 26-27 respectively. In addition, Applicant does not show any specific argument between application and cited references.

4.8 Regarding claim 37, as rejected with 35 U.S.C. 112, the second paragraph cited above, the amended claim is not clear for responding, therefore.

4.9 Regarding claim 38, page 16, Applicant argues that neither of the references discloses the use of outlets. Examiner believes this argument is answered above with respect to claims 1, 7-8 and 20.

4.10 Regarding claims 44-45, page 16, Applicant does not point out any specific difference between claims 7-8 respectively. In addition, Applicant does not show any specific argument between application and cited references.

4.11 Claim 39 is objected as shown above.

4.12 Regarding claim 3-4, page 17-18, Applicant argues that there is no evidence that one skilled in the art would have any motivation to combine the references. Examiner believes this argument is responded above with respect to claim 1.

4.13 Regarding claims 24, 31 and 40, page 18, Applicant does not point out any specific difference between claim 24, 31 and 40 and claim 3, and claim 41 with claim 4. In addition, Applicant does not show any specific difference between application and cited references.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Thai Hoang


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 4/26/08